

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

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160-13 JAMAICA LLC,

Plaintiff,

- against -

CLEAR WIRELESS LLC,

Defendant.  
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Case No. 2:11-cv-00792 (JFB)  
(WDW)

**REPLY AFFIRMATION OF  
MICHAEL S. LUTHER, P.E.**

I, MICHAEL S. LUTHER, affirm and declare, pursuant to 28 U.S.C. § 1746, as follows:

1. As set forth in my original affidavit, I have been a professional structural engineer since the mid 1970s. I have over three decades of extensive managerial, administrative and project experience in civil engineering, environmental, buildings, specialty contracting and general contracting.

2. On January 20, 2011, I made a site visit to the property located at 160-15 Jamaica Avenue, Jamaica, New York (the "Premises") to inspect the property and review repair recommendations described in a November 8, 2010 report prepared by Armour Unsderfer Engineering (AUE). The AUE report was apparently prepared for the architect retained by the tenant, which was performing renovation of the space. I understand the renovation work started sometime in 2010, with only partial completion of the renovation. I again inspected the Premises on February 8, 2011 accompanied by the tenant's engineer and others.

3. I was asked to inspect the Premises, analyze the items AUE believes should be repaired, determine if repairs are needed, determine whether any needed repairs are structural in nature, and whether the building is in working order. I did not review the

parties' lease, and I make no comment on whether any needed repairs have to be performed by one party or the other.

4. As I stated in my original affidavit, it is my professional opinion that the building is certainly in working order. The structural integrity of the building is sound. Most of the items that AUE has identified are only visible because the tenant did its demolition work and opened up the walls. If that had not been done, these items would not have revealed themselves for many years, if ever. Other issues were caused by the tenant's own work. Any repairs that need to be done are fairly minor and can be addressed in a matter of days. Again, none of these items affect the structural integrity of the building, which remains in working order.

5. I have read the opposition papers submitted by the defendant in this case, including the declaration of Mr. Unsderfer of AUE. Nothing in that declaration changes my opinion. Mr. Unsderfer admits in his declaration that he has not prepared drawings or performed load calculations, which I have done. I have also read the defendant's memorandum of law, in which the defendant states that "working order" means that the building has "structural components in such a state that they are capable of performing their intended structural purpose: to support the structure against the stress of wind, gravity and seismic activity." Seismic requirements do not even apply to New York City buildings built prior to the early 1990s (the subject building was built in the late 1800's or early 1900's). Using the rest of defendant's definition of "working order", the subject building is in "working order" based on my experience, my inspections of the Premises, and my calculations.

6. Most wood frame buildings (especially those built earlier than 1940 like the subject building in Jamaica) have some issues. For example, a building could have minor structural issues today that might not reveal themselves, or need to be repaired, for

many years or even decades. That does not mean that the building is not in “working order” today. Under AUE’s analysis, many buildings in New York City would not meet that standard. If that interpretation were correct, the Department of Buildings would be shutting down a lot of buildings in New York.

7. The specific repair recommendations noted in the AUE report and my comments based on my review and experience were set forth in my original affidavit, and are reiterated and updated as follows:

## **Roof**

### *1. Repair suggested by AUE -- Reframe roof parapet*

*My comments --* The roof parapet is in good condition. The parapet framing at floor 2 and floor 1 has been damaged by a past fire and requires repair as described below for floor 2 and floor 1 work. This is not a structural item, and it does not change the fact that the building is in working order.

### *2. Repair suggested by AUE -- Resupport cross beams and add posts at mechanical roof openings*

*My comments --* The framed out openings are for ducts to pass through the roof up to rooftop mounted mechanical units. Loads should be minimal at the openings if the ductwork, which has not been installed, has proper attachment to floor beams. Therefore additional posts and framing at the openings should not be required. At the inspection visit on February 8, 2011, deflection of the framing at the duct openings was noted. My calculations indicate that the girder framing at this area is somewhat overstressed under full roof live load conditions. Therefore, I designed reinforcement to the girders as part of the repair plan. Again, this is a minor repair to minimize any future deflection of the area under full load conditions. The roof framing is in working order. There is no hazardous condition. The repairs will simply increase capacity to provide adequate factor of safety under maximum design loadings.

### *3. Repair suggested by AUE – Clean and repaint roof steel*

*My comments --* The only roof steel is dunnage steel located a couple of feet above the roof to support mechanical equipment. I agree that the steel should be cleaned and repainted. This item does not affect structural condition of the roof, and does not change the fact that the building is in working order.

## Floor 2

*1. Repair suggested by AUE -- Reframe the north wall to repair fire damaged studs and level the roof parapet*

*My comments* -- Fire damaged studs should be replaced or reinforced. The roof is sloped to drain water to scuppers in the middle of the roof; therefore the parapet should be investigated in detail to determine if it should be level or is intended to have a slope.

Note that the north wall does not support any roof or floor beams as they are supported on the west and east walls. Therefore, the north framing only supports the wall covering, and the (light 1 foot high) wood roof parapet. The north framing is not structurally significant to the load carrying capacity of the building. This item does not change the fact that the building is in working order.

*2. Repair suggested by AUE -- Reframe old windows with headers and sills and new studs where replaced by steel panels*

*My comments* -- This item is only of structural significance at areas of framing distress. I did not note any significant framing distress at any of the steel plate areas. Calculations indicate that plywood sheeting is adequate for up to 3 foot wide windows. Steel plates (whose thickness is not known) should have strengths at least that of plywood. Therefore, only windows greater than 3 foot width would need repair, as denoted in my repair plans. This item does not change the fact that the building is in working order.

*3. Repair suggested by AUE -- Resupport W beams coming from the adjacent building*

*My comments* -- I saw this condition at the north wall. I suspect the beam is dunnage steel from the neighbor. There is support by limited infill with masonry between studs of the north wall. No structural distress is evident. Calculation for an assumed load was performed and repairs designed for the dunnage beam support. This isolated condition at the non-load-bearing north wall has no significant effect on the structural integrity of the building. This item does not change the fact that the building is in working order.

*4. Repair suggested by AUE -- Remove and reframe windows on the east wall*

*My comments* -- Removal of windows is often not done when the work is to simply reface the inside surface of the wall (i.e. cover with sheet rock). Unless there is distress in the wall framing around the existing window, there is no structural concern and no need to remove the window. I did not observe any existing windows with adjacent framing distress. Calculations indicate that plywood sheeting is adequate for up to 3 foot wide windows. Since window sheathing spans are generally within this range, I believe this

item does not affect the working condition of the building. This item does not change the fact that the building is in working order.

*5. Repair suggested by AUE -- Reframe slot window at south end of east wall*

*My comments* -- The tenant installed metal studs and framing at this area. I have not evaluated if the framing done by the tenant is or is not adequate. The tenant framing looks flimsy. Header and sill tracks at the opening are not connected to wall studs on the south, so connection repairs would be required at these locations. At the February 8, 2011 site visit, it was agreed that the flimsy metal studs installed by the tenant would be replaced to match those of the adjacent existing construction. Also, connections to header and sill tracks would be established. There is no distress or distortion of any of the wall framing at this area. Therefore, this item did not diminish the working order of the building.

*6. Repair suggested by AUE -- At south wall, repair headers and sills*

*My comments* -- Again, the tenant installed the metal framing at this area and I have not evaluated if the framing done by the tenant is or is not adequate. At the February 8, 2011 site meeting, it was agreed that the flimsy metal studs installed by the tenant would be replaced to match those of the adjacent existing construction. There is no distress or distortion of any of the wall framing at this area. The south wall is not load bearing. Therefore, framing at this area does not affect load capacity of the building roof or flooring. This item does not change the fact that the building is in working order.

*7. Repair suggested by AUE -- At west demising wall, reframe openings and add plywood sheathing.*

*My comments* -- Openings in the wall should be refilled with masonry. (I do not know if this is a party wall or the wall belongs to the west neighbor.)

Plaster on wood lathe which gave the wall some lateral strength was evidently removed by past demolition work. Calculations were done and the repair plans include wood sheathing to establish lateral support for the west wall. Wall areas exposed to wind on the south and north face are small. Therefore it is unlikely that the working condition was significantly affected. Also it is unknown how much wall sheathing or wall plaster was removed as part of the demolition work done by this tenant. This item does not change the fact that the building is in working order.

## **Ground Floor**

*1. Repair suggested by AUE -- At north wall, remove charred beam and reframe with studs*

*My comments --* Fire damaged beams and studs should be reinforced or replaced, similar to item 1 for floor 2. The attached repair plans present the stud, beam and sheathing repairs. Again, this is a non-load-bearing wall, therefore it is not significant to the capacity of the building to support gravity loads. This item does not change the fact that the building is in working order.

*2. Repair suggested by AUE -- At east wall, remove CMU and reframe with wood*

*My comments --* This is a non load bearing portion of the east wall as there is a heavy timber header beam above. The hole in the wall should be repaired with masonry and block. This is not a structural repair item. This item does not change the fact that the building is in working order.

*3. Repair suggested by AUE -- At east wall, reframe openings where windows remain*

*My comments --* Again, removal of windows is often not done when the work is to simply reface the inside surface of the wall (i.e. cover with sheet rock). Unless there is distress in the wall framing around the existing window, there is no structural concern and no need to remove the window. I did not observe any existing windows with adjacent structural framing distress. Calculations indicate that plywood sheathing is adequate for up to 3 foot wide windows. Since window sheathing spans are generally within this range, I believe this item does not affect the working condition of the building. This item does not change the fact that the building is in working order.

*4. Repair suggested by AUE -- At storefront, connect roof diaphragm to the exterior wall*

*My comments --* The non-load bearing south exterior wall framing should be repaired with straps to the existing floor and roof framing. Again, this is a non load bearing wall. Therefore it is not significant to the capacity of the building to support gravity loads. This item does not change the fact that the building is in working order.

*5. Repair suggested by AUE -- Re-sheath west wall in plywood*

*My comments --* Calculations were done and the repair plans include wood sheathing to establish lateral support for the west wall. Wall areas exposed to wind on the south and north face are small. Therefore, it is unlikely that the working condition was affected

significantly. Also, it is unknown how much wall sheathing or wall plaster was removed as part of the demolition work done by this tenant.

## **Basement**

### *1. Repair suggested by AUE -- Identify dry rot in floor framing and replace joists*

*My comments* – The extent of dry rot will be determined by detailed field survey of the existing beams. Repair plans contain details to fix dry rot beams.

Note that framing of the first floor has been reinforced by the addition of longitudinal steel girders at the center of the building and along the west wall. These steel girders were in place prior to the current tenant renovation work and increase the load carrying capacity of the existing floor 1 joists. No spongy or weak floor areas are evident at the ground floor surface. This item does not change the fact that the building is in working order.

## **Conclusion**

In my professional opinion, based on my experience, including my experience with buildings in New York City, my calculations, and my inspections of the Premises, the building was in working order when the tenant was given possession in September 2010, and remains in working order today. “Working order” means that the conditions of the building are such that it is suitable for its intended use. In my professional opinion, the conditions noted at my site visits, and those described in the AUE report, indicate that the existing building is suitable for its intended use, and that any required repairs are minor in nature.

## **The Calculations, Sketches and Plans for the Repairs**

Notwithstanding the foregoing, plaintiff intends to perform virtually all of the repairs mentioned in the AUE report. Calculations and sketches prepared by me in connection with those repairs are attached as Exhibits “A” and “B”. Plans for the work are being submitted to the Department of Buildings for approval.

Of the 16 items listed in the AUE report, all but one will be repaired. For ease of reference, the sole item not being repaired is listed on AUE's January 26, 2011 letter (Exhibit "C") as item number 4 under the heading "2<sup>nd</sup> floor", relating to the windows on the east wall of the building. As discussed, this item does not need to be repaired.



I declare under penalty of perjury that the foregoing is true and correct.

  
MICHAEL S. LUTHER, P.E.

Executed on March 23, 2011 in  
Stewartsville, New Jersey

